Hecla
MINING COMPANY

March 26, 2007

Sent via email

Eric Johnson
U.S. Environmental Protection Agency
Region 8, 8ENF-T
999 18th Street, Suite 300
Denver, Colorado 80202-2466

RE: Progress report for February 2007 activities - Hecla Mining Company Apex Site (EPA ID No. UT982589848, Docket No. RCRA-8-99-06)

Dear Mr. Johnson:

Per paragraph 64 of the Order, enclosed is a copy of the February 2007 progress report for your records.

If you have any questions please do not hesitate to call me at (208) 769-4112 or e-mail at pglader@hecla-mining.com.

Sincerely,

Paul L. Glader
Manager Environmental Services

Encl

Cc: HMC Legal Dept (w/o attachments)
John Jacus, Esq. (DG&S)

6500 Mineral Drive • Suite 200 • Coeur d'Alene, Idaho 83815-9408 • 208/769-4100 • FAX 208/769-4107 • www.hecla-mining.com

Hecla
MINING COMPANY

March 26, 2007

Sent via U.S. Mail

Glenn Rogers, Chairman.
Shivwits Band of Paiute Indian Tribe
P.O. Box 448
Santa Clara, Utah 84765

John Krause
Bureau of Indian Affairs Phoenix Area Office
U.S. Department of Interior
P.O. Box 10
Phoenix, AZ 85001

Kelly Youngbear
BIA Southern Paiute Agency
P.O. Box 720
St. George, UT 84771

RE: Progress report for February 2007 activities - Hecla Mining Company Apex Site (EPA ID No. UT982589848, Docket No. RCRA-8-99-06)

Dear Chairman Rogers, Mr. Krause and Ms. Youngbear:

Per paragraph 64 of the Order, enclosed is a copy of the February 2007 progress report for your records.

If you have any questions please do not hesitate to call me at (208) 769-4112 or e-mail at pglader@hecla-mining.com.

Sincerely,

Paul L. Glader
Manager Environmental Services

Encl

Cc: HMC Legal Dept. (w/o attachments)
John Jacus, Esq. (DG&S) (w/o attachments)
Eric Johnson (USEPA, Region VIII) (w/o attachments)

March 26, 2007

MEMORANDUM TO: Apex File

COPIES TO: distribution

FROM: Paul Glader

SUBJECT: **Progress Report No. 34 for period ending February 28, 2007; Pond 2 Final Closure - Apex Site, Washington County, Utah**

Summary

The 14th visual inspection, per the long term monitoring plan, was conducted on February 25. No unusual conditions were noted.

The settlement monuments were surveyed December 29 - no appreciable settlement has been noted. See attached September and December survey data, Alpha Engineering Company.

Discussion

1. Surface Monitor Results To Date – Since monitoring of the top surface began (Jan 4, 2006), there has been no appreciable movement in the surface monuments at the Apex site. See attached MEI Surface Monument Survey Data Review dated February 20, 2007.

Work Planned for Next Period

1. Visual inspection of site.
2. Settlement monument survey – quarterly basis – next survey in March.

Sampling and Analysis in Period

Field Tests, Inspections & QA/QC

1. The 14th post closure site inspection was done on February 25; a copy of the inspection report is included in the Supplemental Attachments section.
2. See attached MEI Surface Monument Survey Data Review dated February 20, 2007.

Cost and Schedule

Committed costs in February 2007 were $788. Total project to date committed is approximately $1,242,600. The cost report for February is attached.

Current status of the deliverables listed in the RCRA 7003 order is as follows:

Deliverable	Reference Paragraph	Due	Remarks
Post warning signage around perimeter of site	57	**15 days after effective date of order**	Work completed on March 9, 2004
Begin implementation of closure plan	63	**45 days after receipt of filing of order**	Work started on February 23, 2004
Monthly progress reports	64	**28th day after close of month**	Requirement in effect after order is filed.
Completion report	66	**30 days after completion of all closure plan tasks**	Construction completion report submitted on 3/13/2006. A follow-up report to be issued after end of monitoring period.

The update of the schedule milestones is on the following table:

Milestone	Target	Actual	Remarks
Issue bid package – Phase I (Sump Drains)	6/14/04	***6/15/04***	Portion of RFP materials issued at pre-bid on 6/14/04; remainder sent via courier
Issue RFP package – Phase III	6/24/04	***6/24/04***	
Award contract for Phase I	6/24/04	***6/29/04***	Date contract was shipped to Hughes
Pre-bid meeting – Phase III	7/19/04	***7/19/04***	
Start Phase I (Sump Drains) construction	7/12/04	***7/19/04***	
Start Phase II (Evaporation)	7/19/04	***7/29/04***	
Receive bids for Phase III	8/2/04	***8/2/04***	
Re-bid Phase III contract package	April 2005	***4/27/05***	Date bid package was sent to Hughes
Start Phase III construction	End of August 2005	***8/29/05***	Start of contractor mobilization
Complete Phase III construction	Dec 23rd 2005	***12/23/05***	Completion of contract scope of work
Issue Construction Completion Report	Week of 3/13/2006	***3/13/06***	

Supplemental Attachments

1. February 25, 2007 long term monitoring inspection report, by D. Truman.
2. February 20, 2007 Surface Monument Survey Data Review, by D. Gibbs, MEI.
3. September 21, 2006 and December 29, 2006 Monument Monitoring, Alpha Engineering Company.
4. February Cost Report

Annual Site Inspection Summary Sheet - Apex Site - Pond 2

Hecla Mining Company - Long-Term Maintenance and Monitoring Plan

2 (Feb) 06

Form 1 of 4 - Summary

Date: 1-25-07

Inspector: D. Tremmel

Cover System Component	Potential Problem		Allowable Limits	Limits Potentially Exceeded
Site Perimeter	Erosion or Fencing Issues		NA	NA
Cover System (outslopes, top, rock)	Subsidence		**Minor**: ponding < 1" some gullying / erosion	Yes X * No __
			Significant: see Table 2	Yes __ * No X
	Embankment Slope Stability		excessive movement or surface cracks > than 1"	Yes __ * No X
	Gullying	on top	depth > 1"	Yes __ * No X
		at embankment crest or on outslope	depth > 2"	Yes __ * No X
		w/in normal flow channel in diversion channel	no gullying allowed	Yes __ * No X
		w/in diversions at toe of impoundment outslope	no gullying allowed	Yes __ * No X
		in diversion channel at any other location	NA	NA
	Erosion Protection Stability		rock subsiding or missing	Yes * No X
	Seepage		no colored seepage allowed (red, blue, yellow w/ crystallization)	Yes * No X
Runoff Control System	Diversion Channel		rock in place, channel not moving, fence stable	Yes X * No
	Diversion Swales		rock in place, no silting in or head cutting	Yes X * No
	Excessive silt build up at fence lines in diversion channel		allowed if not effecting cover system	Yes X * No __

* Mark all areas of concern or requiring repairs on attached site map.

Annual Site Inspection - Apex Site - Pond 2

Hecla Mining Company - Long-Term Maintenance and Monitoring Plan

Form 2 of 4 - Site Perimeter

2 (Feb) 06

Inspection Date: 2-25-07

Inspector: D. Tran

Visible Outlying Areas

Observed Condition: No Problems.

Observed Damage: None

May require repair: Yes __* No X

Property Boundary Fence and Gate (walk fence line)

Observed Condition: Fence & Sign Look good.

Observed Damage: None

Potential Corrective Actions: None

May require repair: Yes __* No X

All Upgradient Areas (areas that drain onto property)

Observed Condition: All Areas Look good.

Observed Damage: None

May require repair: Yes __* No X

* Mark all areas of concern or requiring repairs on attached site map.

Annual Site Inspection - Apex Site - Pond 2

Hecla Mining Company - Long-Term Maintenance and Monitoring Plan

Form 3 of 4 - Impoundment

Inspection Date: 2-25-07 PG
Inspector:

Outslopes

Observed Performance:	Rock Cover Subsidence:	Yes __ No X	May require repair: Yes __ * No X
	Excessive Slope Movement (failure):	Yes __ No X	May require repair: Yes __ * No X
	Gully Development:	Yes __ No __	May require repair: Yes __ * No X
	Observable Leachate (colored):	Yes __ No X	May require repair: Yes __ * No X
	Excessive Siltation (at slope toe):	Yes __ No X	May require repair: Yes __ * No X

Observed Damage: Some minor Development.

Potential Corrective Actions: None

Top (top surface soils)

Observed Performance:	Cracking (>1" width):	Yes __ No X	May require repair: Yes __ * No X
	Settlement / Evidence of Ponding:	Yes __ No X	May require repair: Yes __ * No X
	Erosion / Gullying:	Yes __ No X	May require repair: Yes __ * No X

Observed Damage: None

Potential Corrective Actions: None

Erosion Protection Layer (rock)

Observed Performance:	Rock Staying in Place:	Yes X No __	May require repair: Yes __ * No X
	Rock Subsiding:	Yes __ No X	May require repair: Yes __ * No X
	Missing Rock:	Yes __ No X	May require repair: Yes __ * No X

Observed Damage: None

Potential Corrective Actions: None

* Mark all areas of concern or requiring repairs on attached site map.

Annual Site Inspection - Apex Site - Pond 2

Hecla Mining Company - Long-Term Maintenance and Monitoring Plan

Form 4 of 4 - Diversion Channel and Swales

2 (Feb) PG

Date: 1-25-07
Inspector: D

Diversion Channel

Observed Performance:	Erosion Protection in place:	Yes X No __	May require repair: Yes __* No X
	Normal Flow Channel in place:	Yes X No __	May require repair: Yes __* No X
	Encroaching on Site Fencing:	Yes __ No X	May require repair: Yes __* No X

Observed Damage: NONE

Potential Corrective Actions: NONE

Diversion Swales

Observed Performance:	Erosion Protection in place:	Yes X No __	May require repair: Yes __* No X
	Flow Channel Silting In:	Yes __ No X	May require repair: Yes __* No X
	Head Cutting:	Yes __ No X	May require repair: Yes __* No X

Observed Damage: NONE

Potential Corrective Actions: NONE

* Mark all areas of concern or requiring repairs on attached site map.

MONSTER ENGINEERING INC
ENGINEERING DESIGN MANAGEMENT
3031 banner spring ranch road
laporte, colorado 80535
(970) 221.7117
fax (970) 224.0161
email monster@peakpeak.com

MEMORANDUM

TO: Paul Glader (Hecla Mining Company)
FROM: Doug Gibbs (Monster Engineering Inc.)
DATE: 2/20/07
SUBJECT: **Surface Monument Survey Data Review – Apex Site**

A full year of surface monument surveying (January to December 2006) has been completed by Alpha Engineering at the Apex Site. Based on collected data, the elevation of the reclaimed impoundment top surface has in general decreased very slightly at most locations. Data for the year was corrected based on maintaining a zero elevation change at Monument #10 (at the gate). This monument (#10) is the baseline from which all other monuments are surveyed, is located outside of the impoundment, and should show no movement between monitoring periods.

Total survey monument elevation changes since installation are shown in the following table.

Monument	Total Elevation Change January 4 to December 29, 2006	
	(feet)	(inches)
1	-0.08	-0.96
2	-0.04	-0.48
3	-0.10	-1.2
4	-0.02	-0.24
5	-0.02	-0.24
6	-0.03	-0.36
7	-0.16	-1.9
8	-0.04	-0.48
9	-0.07	-0.84
10 (baseline @ gate)	NA	NA
11 / Main (@ impoundment center)	-0.03	-0.36
Average	-0.06	-0.72

NA – baseline corrected to show no movement

To date it appears that most period to period apparent movement can be attributed to surveying accuracy limitations as this data shows individual monuments both increasing and decreasing in elevation. However, when data for all monuments is "corrected" by keeping the baseline monument's (#10) elevation change to zero, then a general trend in decreasing elevations in all the other monuments becomes apparent, especially with monuments #1, #3, #7, and #9.

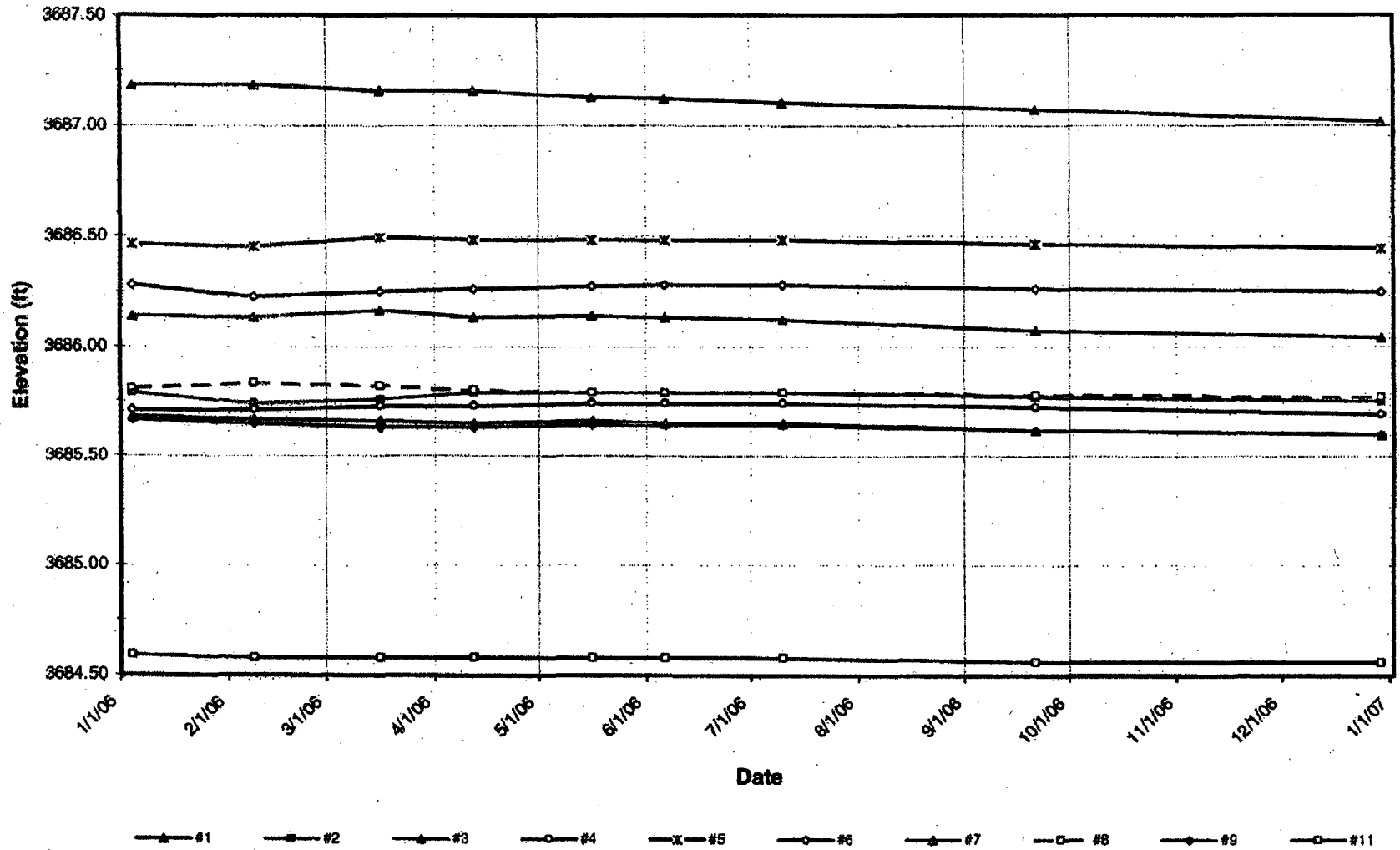
The elevation at Monument #7 (near the impoundment center) decreased the most (1.9 inches) during 2006. Interestingly, the elevation at monument #11, which is the nearest monument to #7, and is also located near the center, decreased a total of only 0.36 inches over that same time period. Slightly greater settlement in and nearer the center of the impoundment is to be expected as significant quantities of fill were placed in this area during construction.

Elevations at Monuments #4 and #5 on the southwest side of the impoundment have decreased the least (0.24 inches). The average decrease in elevation for all 10 monuments is 0.72 inches.

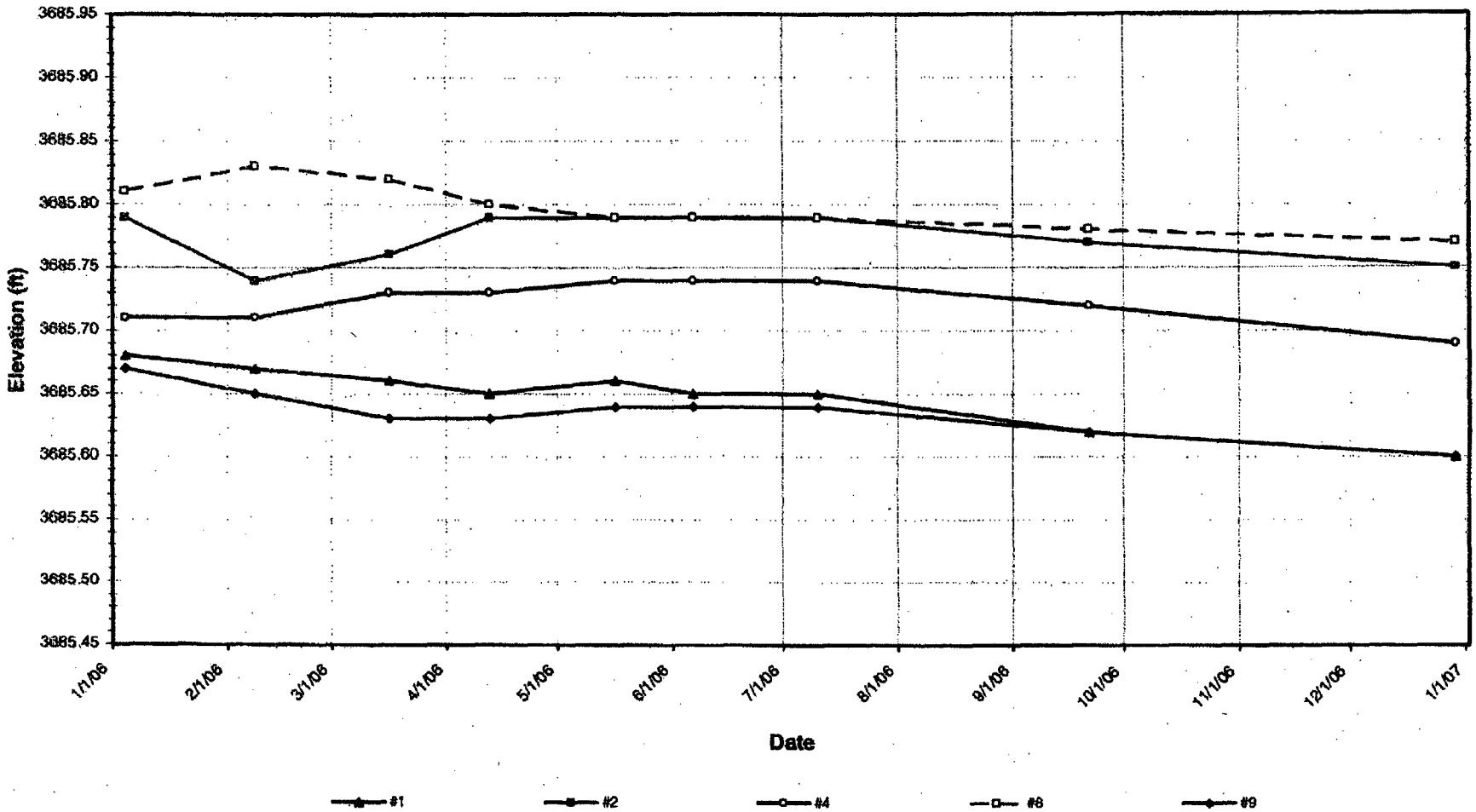
All elevation data provided by Alpha Engineering is presented graphically on the following pages. The first graph shows all monuments (except #10 the baseline point) on a scale that allows all data to be compared. The next five graphs have expanded and equivalent "Y" axes scales in order to more clearly show elevation changes and for ease of comparison between graphs. Based on a review of the graphs it appears that the rate of elevation change for all monuments is consistent. A monument location map (provided by Alpha Engineering) is attached on the last page of this document.

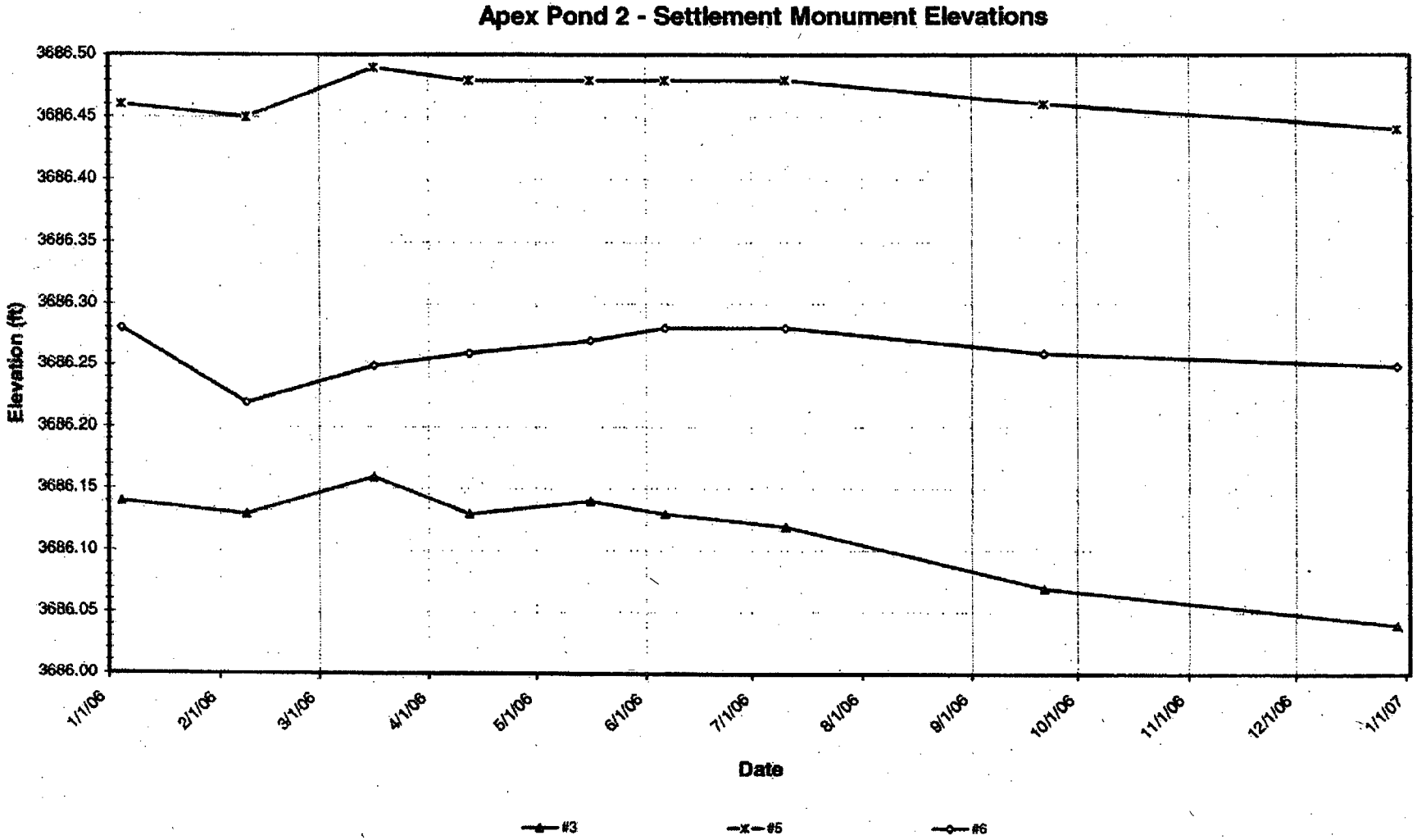
Based on data collected to date, MEI recommends that Hecla continue with their current plan and collect elevation data quarterly. Please call or email me if you have any questions concerning this review.

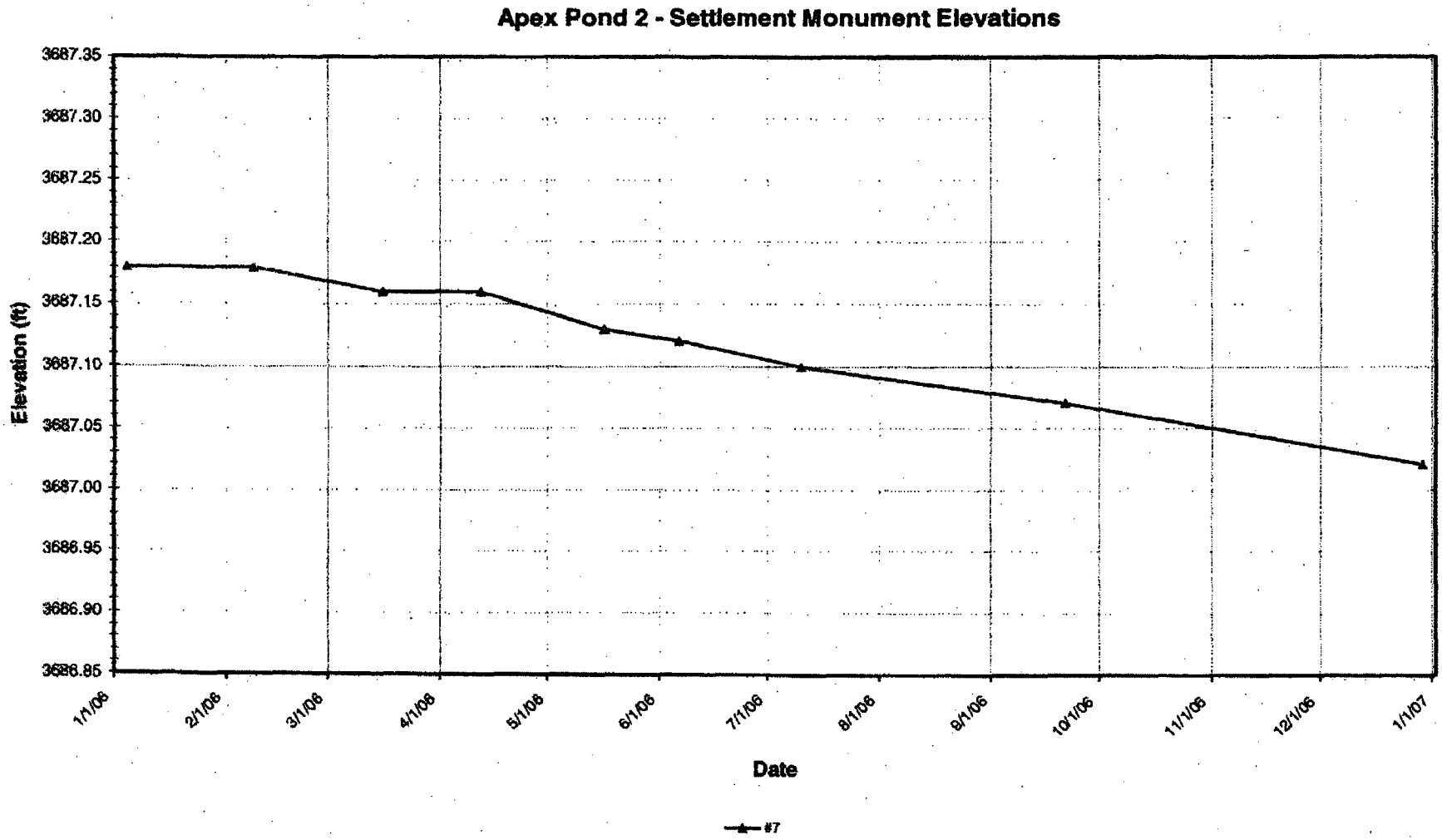
Apex Pond 2 - Settlement Monument Elevations

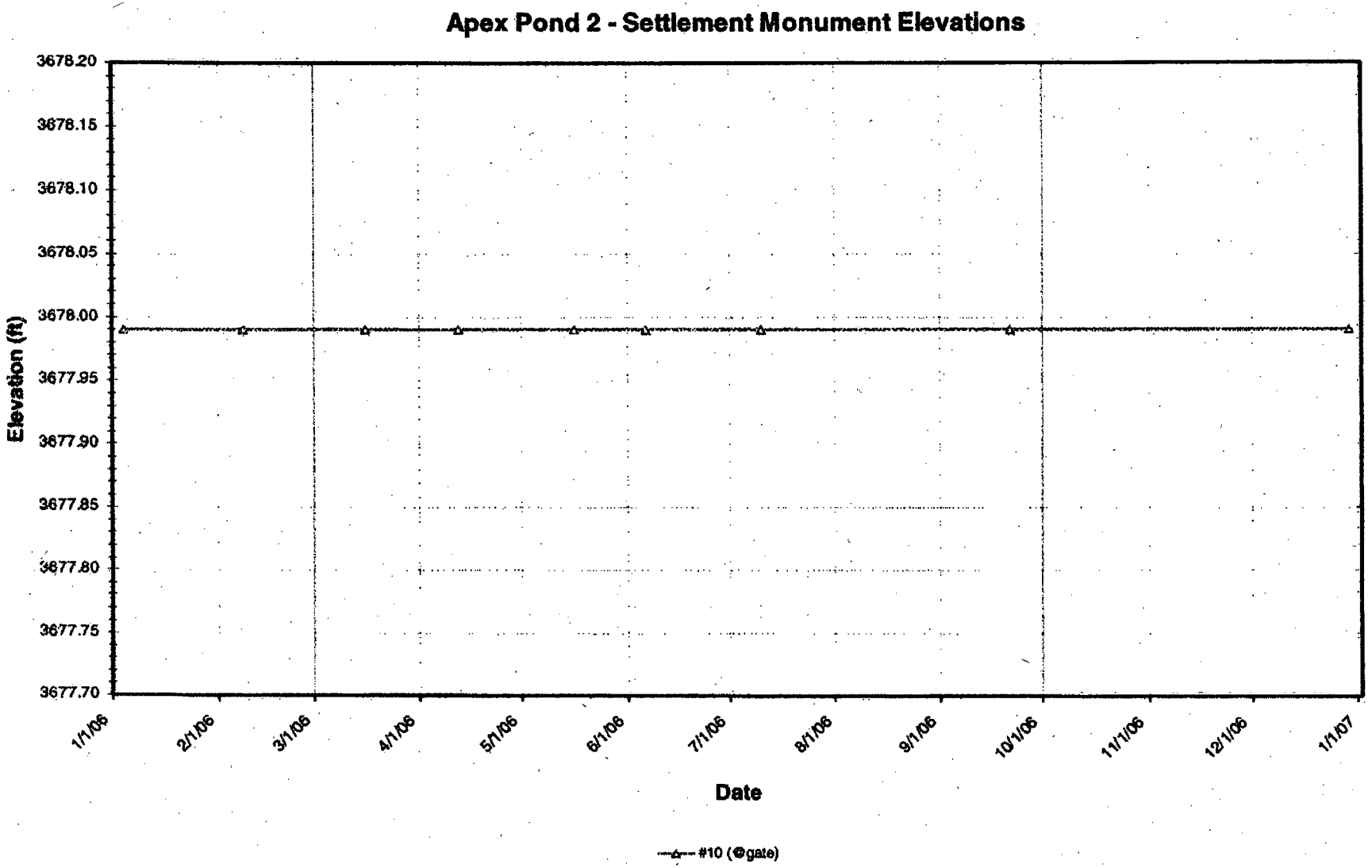


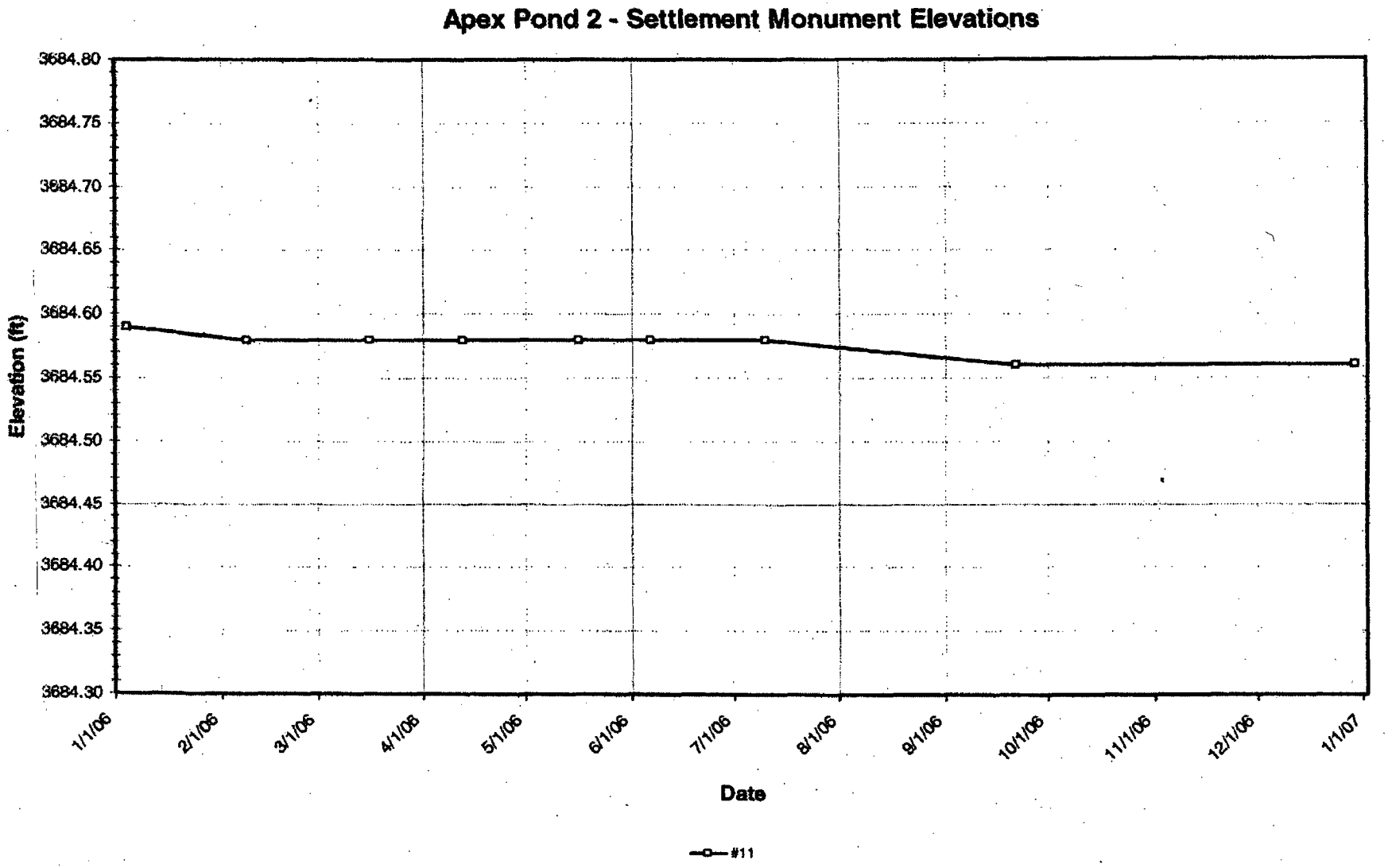
Apex Pond 2 - Settlement Monument Elevations

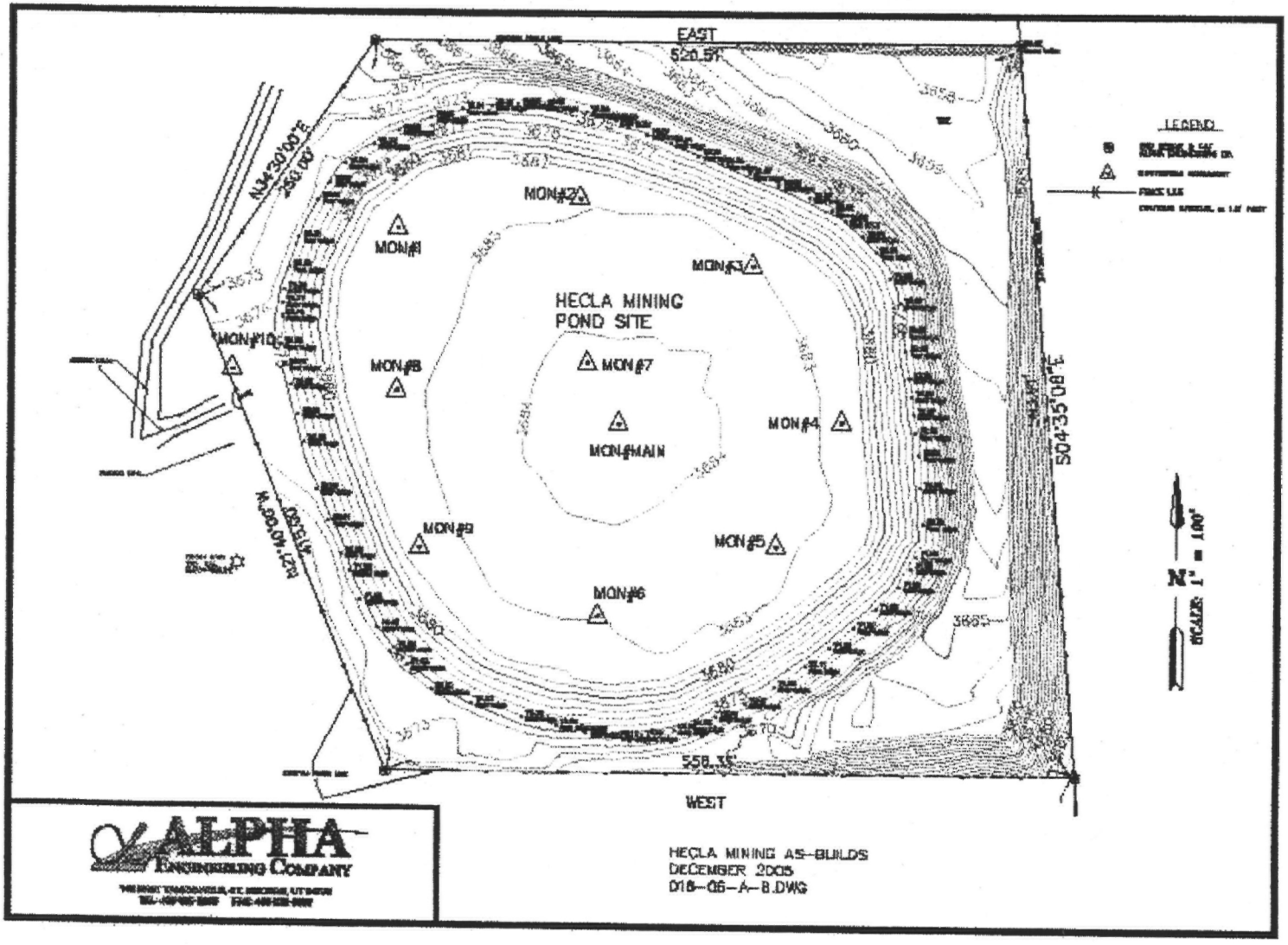



Apex Pond 2 - Settlement Monument Elevations
Elevation (ft)
3686.50
3686.45
3686.40
3686.35
3686.30
3686.25
3686.20
3686.15
3686.10
3686.05
3686.00
1/1/06
2/1/06
3/1/06
4/1/06
5/1/06
6/1/06
7/1/06
8/1/06
9/1/06
10/1/06
11/1/06
12/1/06
1/1/07
Date
#3
#5
#6


Apex Pond 2 - Settlement Monument Elevations
Elevation (ft)
3687.35
3687.30
3687.25
3687.20
3687.15
3687.10
3687.05
3687.00
3686.95
3686.90
3686.85
1/1/06
2/1/06
3/1/06
4/1/06
5/1/06
6/1/06
7/1/06
8/1/06
9/1/06
10/1/06
11/1/06
12/1/06
1/1/07
Date
#7


Apex Pond 2 - Settlement Monument Elevations
3678.20
3678.15
3678.10
3678.05
3678.00
3677.95
3677.90
3677.85
3677.80
3677.75
3677.70
Elevation (ft)
1/1/06
2/1/06
3/1/06
4/1/06
5/1/06
6/1/06
7/1/06
8/1/06
9/1/06
10/1/06
11/1/06
12/1/06
1/1/07
Date
#10 (@gate)


Apex Pond 2 - Settlement Monument Elevations
Elevation (ft)
3684.80
3684.75
3684.70
3684.65
3684.60
3684.55
3684.50
3684.45
3684.40
3684.35
3684.30
1/1/06
2/1/06
3/1/06
4/1/06
5/1/06
6/1/06
7/1/06
8/1/06
9/1/06
10/1/06
11/1/06
12/1/06
1/1/07
Date
#11


EAST
520.5'
N34°30'00"E
258.00'
MON#1
MON#2
MON#3
MON#4
MON#5
MON#6
MON#7
MON#8
MON#9
MON#10
MON#MAIN
HECLA MINING
POND SITE
S04°35'08"E
N00°09'42"W
558.35'
WEST
LEGEND
1" = 100'
ALPHA
ENGINEERING COMPANY
HECLA MINING AS-BUILDS
DECEMBER 2005
D18-05-A-B.DWG

ALPHA ENGINEERING COMPANY

148 East Tabernacle, St. George, UT 84770 • (435) 628-6500 • Fax: (435) 628-6553

HECLA MINING SITE
MONUMENT MONITORING
(AS-BUILD DATE: DECEMBER 29, 2006)

Monument #	Northing	Easting	Elevation	Remarks
#1	10121.35	10130.75	3685.64	Top alum. cap
#2	10146.02	10277.46	3685.79	Top alum. cap
#3	10092.32	10417.34	3686.08	Top alum. cap
#4	9966.67	10489.50	3685.73	Top alum. cap
#5	9865.68	10437.08	3686.48	Top alum. cap
#6	9807.82	10293.18	3686.29	Top alum. cap
#7	10013.32	10283.65	3687.06	Top alum. cap
#8	9989.92	10130.34	3685.81	Top alum. cap
#9	9862.81	10149.31	3685.64	Top alum. cap
#10	10006.02	9997.82	3678.03	Top alum. cap
#11	9964.24	10309.03	3684.60	Top alum. cap

ALPHA ENGINEERING COMPANY

148 East Tabernacle, St. George, UT 84770 • (435) 628-6500 • Fax: (435) 628-6553

HECLA MINING SITE
MONUMENT MONITORING
(AS-BUILD DATE: SEPTEMBER 21, 2006)

Monument #	Northing	Easting	Elevation	Remarks
#1	10121.36	10130.70	3685.65	Top alum. cap
#2	10146.00	10277.46	3685.80	Top alum. cap
#3	10092.32	10417.34	3686.10	Top alum. cap
#4	9966.67	10489.50	3685.75	Top alum. cap
#5	9865.67	10437.07	3686.49	Top alum. cap
#6	9807.82	10293.16	3686.29	Top alum. cap
#7	10013.32	10283.64	3687.10	Top alum. cap
#8	9989.91	10130.34	3685.81	Top alum. cap
#9	9862.81	10149.31	3685.65	Top alum. cap
#10	10006.02	9997.80	3678.02	Top alum. cap
#11	9964.23	10309.03	3684.59	Top alum. cap

Activity	2004 Budget	Revised Budget May 2004	Committed Cost this Period	Cumulative Committed Cost To Date 2-28-07	Forecasted Cost To Complete	Forecasted Final Cost	Remarks on Forecast to Complete
Phases I through III *(Completed February 2006)*							
Phase I - Drain Excess Liquid From Tailings	189,200	72,700		67,928	0	67,928	
Phases II, IIA + IIB - Evaporate Excess Liquid	6,000	8,000		242,882	0	242,882	
Phase III - Regrading & Final Cover System	337,000	342,050		504,742	0	504,742	
Field Indirect Costs	164,500	213,568		378,517	0	378,517	Includes Jan + Feb 2006 long term monitoring costs
Hecla Costs	18,700	18,700	0	33,324	0	33,324	
Subtotal Phases I through III	**715,400**	**655,018**	**0**	**1,227,393**	**0**	**1,227,393**	
Long Term Monitoring *(through FY 2010)*							
Site Inspections			788	2,551	2,134	4,685	
Settlement Monitoring			0	4,050	6,075	10,125	
Consultant Support:							
Annual Geotechnical Engineer Inspections			0	2,495	18,100	20,595	Includes settlement monitoring data analysis
Vegetation Monitoring			0	0	20,000	20,000	Allowance for surveys in FY 2007, 2009 and 2010
Site Conditions Review - MEI			0	3,161			
Site Conditions Review - SVL Analytical			0	891			
Maintenance:							
Erosion Repair Allowance			0	0	7,500	7,500	
Overseeding Allowance			0	0	9,920	9,920	
Hecla Project Management Costs:							
Labor			0	2,066	8,109	10,175	
Travel expenses			0	0	1,312	1,312	
Subtotal Long Term Monitoring	**0**	**0**	**788**	**15,214**	**73,150**	**84,312**	
Total Pond 2 Final Closure	**715,400**	**655,018**	**788**	**1,242,607**	**73,150**	**1,311,705**	

Ericr Johnson/ENF/R8/USEPA/US
03/26/2007 03:49 PM

To Amy Swanson/ENF/R8/USEPA/US@EPA, Donna Jackson/P2/R8/USEPA/US@EPA
cc
bcc
Subject Fw: Apex Monthly Report - February 2007

FYI.
----- Forwarded by Ericr Johnson/ENF/R8/USEPA/US on 03/26/2007 03:48 PM -----

Paul Glader <pglader@hecla-mining.com>
03/26/2007 02:45 PM

To Ericr Johnson/ENF/R8/USEPA/US@EPA
cc
Subject Apex Monthly Report - February 2007

Eric
I have continued my practice of including copies of the "non monthly" items for a second month in a row ie: Survey results for Sep & Dec and Doug Gibb's stability report from Feb.

Paul

<<Apex Pond 2 - progress rpt 34 complete, february 2007.pdf>>

Apex Pond 2 - progress rpt 34 complete, february 2007.pdf